UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/815,546	03/22/2001	Thomas Andrew Brunet	AUS920000951US1	6465

			EXAMINER	
35525	7590	10/05/2004	HUYNH, CONG LAC T	

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ART UNIT	PAPER NUMBER
2178	

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

		Application No.	Applicant(s)
Office Action Summary		09/815,546	BRUNET ET AL.
		Examiner	**Art Unit**	
		Cong-Lac Huynh	2178	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>22 March 2001</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-29</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-7,9-18,20-22 and 24-29</u> is/are rejected.

7) ☐ Claim(s) <u>8, 19, 23</u> is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>22 March 2001</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to communications: the application filed on 3/22/01.

2.   Claims 1-29 are pending in the case. Claims 1, 12, 20, 27-29 are independent

claims.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

5.   Claims 1-2, 4-7, 9-15, 17-18, 20-22, 24-29 are rejected under 35 U.S.C. 103(a)

as being unpatentable over McKenty et al. (US Pat No. 6,088,675, 7/11/00, filed

3/23/99, priority 10/22/97) in view of Maslow et al. (US Pat No. 6,538,673 B1, 3/25/03,

filed 4/13/00, priority 8/23/99).

Regarding independent claim 1, McKenty discloses:

- parsing an electronic document into a parse tree (col 2, lines 60-67, col 4, lines

  45-50)

- *a cursor is a reference to a particular position*, or node, within a tree while

  traversing the tree data structure of the document, and the *cursors may be used*

  to interactively control the position of the SGML document being read aloud (col

  5, lines 37-51)

- receiving user input while the SGML document is being read and the reader

  stops at a current position (col 6, lines 1-12, 48-57)

McKenty does not disclose:

- receiving a user request for a description of cursor position in the electronic

  document

However, it would have been obvious to one of ordinary skill in the art at the time of the

invention was made to have modified McKenty to include receiving a user request for a

description of cursor position in the electronic document for the following reason. The

fact that a user input can be received during the reading of the electronic document at a

cursor position and the reader stops reading suggests that a request for a description of

the cursor position in the electronic document can also be made as a user input while

the document is being read.

McKenty also does not disclose:

- using an algorithm to construct a position response by walking up the parse tree, from the tree node associated with the current position in the electronic document to the root of the electronic document

- delivering the position response to the user

Maslow discloses walking up a document tree from the selected node to the root node *to find the tree node that corresponds to the document fragment selected by the user* (col 9, lines 5-18).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Maslow to use walking up the parse tree from the tree node to the root of the electronic document to find a requested position in a document made by a user since said <u>requested position</u> is considered as equivalent to the <u>position of a fragment *selected by a user*</u>, and finding the position of a fragment selected by a user is a type of request made by a user for a selected position.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Maslow into McKenty for the following reason. Maslow discloses walking up the tree for finding the position of the fragment selected by a user providing the advantage to incorporate into McKenty for quickly finding the current position by walking up the tree only from the current node to the root node instead of parsing the whole tree as usual to obtain the response of the cursor position requested by a user.

Also, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Maslow into McKenty for delivering the position

response to the user since finding the position as requested by a user suggests that a

response to said request when found should be provided to the user.

Regarding claim 2, which is dependent on claim 1, McKenty does not explicitly disclose

that the position response is audible.

Instead, McKenty does disclose that a user can issue a command causing the system

to back up within a document and re-read the phrase that the user misses a few words

when hearing (col 9, lines 1-10).

It would have been obvious to one of ordinary skill in the art at the time of the invention

was made to have modified McKenty for providing the audible position response since

the fact that McKenty responds to the request *by re-reading* the missing part to user

shows that the response to users in McKenty is an audible response. This suggests

that the responses to the position requests made by a user would be an audible

response.

Regarding claim 4, which is dependent on claim 1, McKenty does not explicitly

discloses that the position response is by means of a text-only display.

However, it would have been obvious to one of ordinary skill in the art at the time of the

invention was made to have modified McKenty to include the text-only display to

McKenty since the electronic document in McKenty is originally created for a typical

markup language document SGML, and thus the document as well as the options

related to the document can be displayed in text format.

Regarding claim 5, which is dependent on claim 1, McKenty discloses that the user command requesting cursor position is a voice command (col 7, lines 1-10: ".. the *user provides some input*, which can be in the form of keyboard input, *voice commands*, or any other kind of input..."; the fact that a user input for a request via a voice command inherently shows that a request for a cursor position can be made via a voice command).

Regarding claim 6, which is dependent on claim 1, McKenty discloses that the algorithm uses text-to-speech technology (col 6, lines 13-22, col 9, lines 21-33, 52-53).

Regarding claim 7, which is dependent on claim 1, McKenty does not explicitly disclose that the position response comprises all nodes in the walk up the parse tree. Maslow discloses that the position of the selected fragment comprises all nodes in the walk up the parse tree (**col 9, lines 5-14**: ".. Then we use parent links to walk up from the selected node to the root node. While walking, we record the *indices of nodes in their parents* ...").

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Maslow to include that the position response comprises all nodes in the walk up the parse tree for the following reason. *Recording the indices of nodes in their parents when walking up* from the selected node to the root node suggests that the position of the selected node include all the nodes from the selected

node to the root node in the walk up since the index of the current node is clearly

formed by counting all nodes in said walk up the parse tree.

It would have been obvious to one of ordinary skill in the art at the time of the invention

was made to have combined Maslow into McKenty for the following reason. Maslow

suggests that the position of the selected node include all nodes from the selected node

to the root via walking up the tree providing the advantage to incorporate into McKenty

for easily and quickly obtaining a response to a request for a position in an electronic

document.

Regarding claim 9, which is dependent on claim 1, McKenty does not disclose that the

position response comprises:

- a predefined number of nodes in the walk up the parse tree

- wherein the predefined number of nodes is set by the user and limited by the

   number of nodes between the current position and the electronic document root

Maslow discloses:

- a predefined number of nodes in the walk up the parse tree (**figure 4**: the

   number of nodes from node 20 to the root is predefined when walking up the

   tree)

- wherein the predefined number of nodes is set by the user and limited by the

   number of nodes between the current position and the electronic document root

   (**figure 4**: the predefined nodes is limited from the root to node 20, and is set by

the user since these nodes, which are document elements, are created by the

user)

It would have been obvious to one of ordinary skill in the art at the time of the invention

was made to have combined Maslow into McKenty since Maslow discloses a predefined

nodes from the current node to the root where said predefined number of nodes is set

by a user providing the advantage to incorporate into McKenty for finding the current

position since the current position is located at the current node and it is obvious that

the index of the current node is counted based on the number of nodes from the root to

the current node.

Regarding claim 10, McKenty discloses that the electronic document is a HTML

document (**col 1, lines 60-67**: the electronic document is SGML document; however,

McKenty does disclose that another application of SGML such as HTML can be used

(col 1, lines 13-31)).

Regarding claim 11, McKenty discloses that the electronic document is a XML

document (**col 1, lines 60-67**: the electronic document is SGML document; however,

McKenty does disclose that another application of SGML such as XML can be used (col

1, lines 13-31)).

Regarding independent claim 12, McKenty discloses:

- parsing an electronic document into a parse tree (col 2, lines 60-67, col 4, lines
  45-50)

- entering a user command for an instruction while the electronic document is
  being read so that the reader stops at a current position (col 6, lines 1-12, 48-57)

McKenty does not disclose:

- entering a user command requesting a description of cursor position in an
  electronic document

However, it would have been obvious to one of ordinary skill in the art at the time of the
invention was made to have modified McKenty to include entering a user command
requesting a description of cursor position in an electronic document for the following
reason. The fact that McKenty has the capability for a user to *enter a command for an
instruction while the electronic document is being read* suggests a command for
requesting a description of cursor position in an electronic document can be entered by
a user.

McKenty also does not disclose:

- receiving a position response comprising nodes in a walk up a parse tree
  constructed from the electronic document

Maslow discloses walking up a document tree from the selected node to the root node
to find the tree node that corresponds to the document fragment *selected by a user* (col
9, lines 5-18).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Maslow to use walking up the parse tree from the tree node to the root of the electronic document to find a requested position in a document made by a user since said requested position is considered as equivalent to the position of a fragment selected by a user, and finding the position of a fragment selected by a user is a type of request made by a user for a selected position.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Maslow into McKenty for the following reason. Maslow discloses walking up the tree for finding the position of the fragment selected by a user providing the advantage to incorporate into McKenty for quickly finding the current position by walking up the tree only from the current node to the root node instead of parsing the whole tree as usual to obtain the response of the cursor position requested by a user.

Regarding claim 13, which is dependent on claim 12, McKenty discloses entering a user request for cursor position is by means of voice command (col 7, lines 1-10: ".. the *user provides some input*, which can be in the form of keyboard input, *voice commands*, or any other kind of input..."; the fact that a user input for a request via a voice command inherently shows that a request for a cursor position can be made via a voice command).

Regarding claim 14, which is dependent on claim 12, McKenty does not explicitly disclose that the position response comprises all nodes in the walk up the parse tree. Maslow discloses that the position of the selected fragment comprises all nodes in the walk up the parse tree (**col 9, lines 5-14**: ".. Then we use parent links to walk up from the selected node to the root node. While walking, we record the *indices of nodes in their parents* ...").

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have modified Maslow to include that the position response comprises all nodes in the walk up the parse tree for the following reason. *Recording the indices of nodes in their parents when walking up* from the selected node to the root node suggests that the position of the selected node include all the nodes from the selected node to the root node in the walk up since the index of the current node is clearly formed by counting all nodes in said walk up the parse tree.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Maslow into McKenty for the following reason. Maslow suggests that the position of the selected node include all nodes from the selected node to the root via walking up the tree providing the advantage to incorporate into McKenty for easily and quickly obtaining a response to a request for a position in an electronic document.

Regarding claim 15, which is dependent on claim 12, McKenty does not explicitly disclose that the position response is audible.

Instead, McKenty does disclose that a user can issue a command causing the system

to back up within a document and re-read the phrase that the user misses a few words

when hearing (col 9, lines 1-10).

It would have been obvious to one of ordinary skill in the art at the time of the invention

was made to have modified McKenty for providing the audible position response since

the fact that McKenty responds to a read request *by re-reading* the missing part to user

shows that the response to users in McKenty is an audible response. This suggests

that the responses to the position requests made by a user would be an audible

response.

Regarding claim 17, which is dependent on claim 12, McKenty does not explicitly

discloses that the position response is by means of a text-only display.

However, it would have been obvious to one of ordinary skill in the art at the time of the

invention was made to have modified McKenty to include the text-only display to

McKenty since the electronic document in McKenty is originally created for a *typical*

markup language document SGML, and thus, the document as well as the options

related to the document can be displayed in text format.

Regarding claim 18, which is dependent on claim 12, McKenty does not disclose that

the position response comprises:

-    a predefined number of nodes in the walk up the parse tree

- wherein the predefined number of nodes is set by the user and limited by the number of nodes between the current position and the electronic document root

Maslow discloses:

- a predefined number of nodes in the walk up the parse tree (figure 4: the number of nodes from node 20 to the root is predetermined when walking up the tree)

- wherein the predefined number of nodes is set by the user and limited by the number of nodes between the current position and the electronic document root (figure 4: the predetermined nodes is limited from the root to node 20, and is set by the user since these nodes, which are document elements, are created by the user)

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Maslow into McKenty since Maslow discloses a predetermined nodes from the current node to the root where said predetermined number of nodes is set by a user providing the advantage to incorporate into McKenty for easily and quickly finding the current position since the current position is located at the current node and it is obvious that the current node is counted based on the number of nodes from the root to the current node.

Claims 20-22, 24-26 are for a computer program of method claims 1, 6-7, 9-11, and are rejected under the same rationale.

Claim 27 is for a computer program product of method claim 12, and is rejected under the same rationale.

Claim 28 is for an apparatus of method claims 1 and 3, and is rejected under the same rationale.

Claim 29 is for a system of method claim 1, and is rejected under the same rationale.

6.   Claims 3 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKenty in view of Maslow as applied to claim 1 above, and further in view of Cragun (US Pat No. 5,412,189, 5/2/95).

Regarding claim 3, which is dependent on claim 1, McKenty and Maslow do not disclose that the position response is by means of a tactile feedback mechanism. Cragun discloses a touch screen apparatus with tactile feedback information is added as a part of a desktop or laptop computer to improve the ease of use of a computer system for visually impaired users (abstract, col 1, lines 40-67).
It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined Cragun into McKenty since Cragun provides a touch screen with tactile feedback information added to a desktop or laptop computer for helping visually impaired users in using computer providing the advantage to incorporate into McKenty and Maslow for giving the position response to users by

means of a tactile feedback mechanism in addition to by means of an audio mechanism
since tactile feedback mechanism is a helpful tool to make electronic documents
accessible to visually impaired users.

Claim 16 includes the same limitations of claim 3, and is rejected under the same
rationale.

Allowable Subject Matter

7.   Claims 8, 19 and 23 are objected to as being dependent upon a rejected base
claim, but would be allowable if rewritten in independent form including all of the
limitations of the base claim and any intervening claims.

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to
applicant's disclosure.

Renzi (US Pat No. 5,583,478, 12/10/96, filed 3/1/95).

DeRose et al. (US Pat No. 5,644,776, 7/1/97, filed 6/7/95).

DeRose et al. (US Pat No. 5,557,722, 9/17/96, filed 4/7/95).

MacKenty et al. (US Pat No. 6,085,161, 7/4/00, filed 3/23/99).

Bjurstrom et al. (US Pat No. 6,594,348 B1, 7/15/03, filed 8/24/01).

Van Hoff (US Pat No. 6,037,144, 6/6/00, filed 5/26/98).

Chung et al. (US Pat No. 6,115,686, 9/5/00, filed 4/2/98).

Lewin (US Pat No. 6,556,973 B1, 4/29/03, filed 4/29/00).

Wesemann et al. (US Pat No. 6,349,132 B1, 2/19/02, filed 12/16/99).

Kasday (US Pat No. 6,108,629, 8/22/00, filed 4/25/97).

Profit, Jr. et al. (US Pat No. 6,636,831 B1, 10/21/03, filed 4/9/99).

Sarukkai (US Pat App Pub No. 2002/0052747 A1, 5/2/02, filed 8/21/01, priority 8/21/00).

Dutta et al. (US Pat App Pub No. 2002/0111974 A1, 8/15/02, filed 2/15/01).

Wu (US Pat App Pub No. 2002/0052747 A1, 11/13/03, filed 2/7/01, priority 8/7/00).

Uppaluru (US Pat App Pub No. 2002/0080927 A1, 6/27/02, filed 1/25/02, priority 11/14/96).

Raman et al., Interactive Audio Documents, ACM 1994, pages 62-68.

Grigonis et al., *Toward TML*, Computer Telephony, August 1999, vol. 7, Iss. 8, pgs. 89-91.

9.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cong-Lac Huynh whose telephone number is 571-272-4125. The examiner can normally be reached on Mon-Fri (8:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-4125.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Cong-Lac Huynh
Examiner
Art Unit 2178
9/22/04